CLAIM AMENDMENTS

1.   (Original) A medical treatment apparatus for providing medication to a patient, comprising:

a medical device having a supply of medication and a means for delivering the medication to the patient, a control algorithm coupled to the medical device, and a sensor coupled to a patient to receive information from the patient concerning the physiological condition of the patient, the information being transferred from the sensor to the control algorithm, wherein the control algorithm is adapted to process the information to control the delivery of the medication from the medical device to the patient based on the information that was processed.

2.   (Original) The medical treatment apparatus of claim 1, further comprising an input device for adjusting parameters of the control algorithm.

3.   (Withdrawn) The medical treatment apparatus of claim 1, further comprising a sensor that receives information from the environment of the patient and transfers the information to the control algorithm which processes the information.

4.   (Currently Amended) A medical apparatus for delivering a treatment to a patient, comprising:

a medical device having a medical treatment and a controller electrically connected to the medical device, the controller dynamically processing a signal received from a sensing device connected to the patient, the controller developing a feedback control based on a result of processing the signal to determine whether medication should be delivered from the medical device to the patient and providing the feedback control to the medical device to control the delivery of the medical treatment to the patient.

5.   (Original) The medical apparatus of claim 4, further comprising a control algorithm electronically connected to the controller, wherein the control algorithm processes the signal received from the sensing device, and wherein the control algorithm develops a feedback control based on the result of processing the signal to determine whether medication should be delivered from the medical device to the patient.

6.   (Original) The medical apparatus of claim 5, wherein the control algorithm for the controller is downloaded to the controller.

7.   (Original) The medical apparatus of claim 4, wherein the medical device has a supply of medication to be delivered to the patient.

8.   (Original) The medical apparatus of claim 4, wherein the signal is automatically obtained from a physiological condition of the patient without intervention from the patient.

9.   (Withdrawn) The medical apparatus of claim 4, wherein the signal is automatically obtained from a sensor without intervention from the patient, and wherein the signal relates to a condition of the environment surrounding the patient.

10.   (Withdrawn) The medical apparatus of claim 4, wherein the controller is a component of the medical device.

11.   (Original) The medical apparatus of claim 4, further comprising an input device coupled to the controller, the input device provided to allow an authorized user to manipulate the control algorithm.

12.   (Original) The medical apparatus of claim 11, wherein the input device is a remote controller located at a second location distinct from a first location, and wherein the medical device is located at the first location.

13.   (Withdrawn) The medical apparatus of claim 4, wherein the sensing device comprises a vital signs monitor coupled to the patient, the vital signs monitor obtaining a signal from the patient.

14.   (Withdrawn) The medical apparatus of claim 4, wherein the sensing device comprises an activity sensor coupled to the patient, the activity sensor obtaining a signal from the patient.

15.   (Withdrawn) The medical apparatus of claim 4, wherein the sensing device comprises a light sensor coupled to the controller, the light sensor obtaining a signal based on the ambient light.

16.   (Withdrawn) The medical apparatus of claim 4, wherein the sensing device comprises an environmental sensor coupled to the controller, the environmental sensor obtaining a first signal based on an environmental factor of the environment of the patient and sending a second signal to the controller.

17.   (Withdrawn) The medical apparatus of claim 4, wherein the controller and the sensing device are an integral component.

18.   (Withdrawn) The medical apparatus of claim 4, wherein the sensing device is an input device that receives manual input.

19.   (Withdrawn) The medical apparatus of claim 18, wherein the patient provides the manual input.

20.   (Original) A medical treatment administration system for delivering a medical treatment to a patient, comprising:

a medical device that delivers a medical treatment to a patient, the medical device having a processor to regulate the distribution of medical treatment to the patient over a period of time; and,

a first sensor coupled to the processor, the sensor receiving a signal from the patient concerning the patient's physiological condition and transmitting the signal to the processor, the processor receiving the signal from the sensor and processing the signal to regulate the distribution of medical treatment from the medical device.

21.   (Withdrawn) The medical treatment administration system of claim 20, wherein the first sensor is an input device that receives manual input.

22.   (Withdrawn) The medical treatment administration system of claim 21, wherein the patient provides the manual input.

23.   (Original) The medical treatment administration system of claim 20, wherein the physiological condition is selected from the group consisting of: the patient's heart rate, the patient's body temperature, the patient's activity, the patient's metabolic demand, the patient's cellular metabolism, and the patient's cellular proliferation.

24.   (Original) The medical treatment administration system of claim 20, wherein the processor has a control algorithm that processes the signal.

25.   (Withdrawn) The medical treatment administration system of claim 20, further comprising an input device for controlling the processor.

26.   (Withdrawn) The medical treatment administration system of claim 20, further comprising a second sensor coupled to the processor, second sensor obtaining a signal based on a condition of the patient's environment, the second sensor further transmitting the signal to the processor.

27.   (Withdrawn) The medical treatment administration system of claim 26, wherein based on the specific medical treatment to be administered to the patient, the processor requests the signal from one of the first sensor and second sensor.

28.   (Withdrawn) The medical treatment administration system of claim 26, wherein based on the specific medical treatment to be administered to the patient, the processor requests signals from both of the first sensor and second sensor, and wherein the processor processes the signals and regulates the distribution of medical treatment from the medical device based on the cumulative result of the processed signals.

29.   (Withdrawn) The medical treatment administration system of claim 20, wherein the sensor receives a plurality of signals from the patient concerning the patient's physiological condition and transmits the signals to the processor, and wherein the processor receives the signals, processes the signals and regulates the distribution of medical treatment from the medical device based on the cumulative result of the processed signals.

30.   (Withdrawn) The medical treatment administration system of claim 20, wherein the sensor includes an activity sensor that monitors the body temperature of the patient and that develops a signal to send to the processor, and a vital signs monitor that monitors the patient's heart rate and that develops a signal to send to the processor to, and wherein based on the specific medical treatment to be administered the processor requests the signal from one of the activity monitor and the vital signs monitor.

31.   (Withdrawn) The medical treatment administration system of claim 24, further comprising a second medical device that delivers a medical treatment to the patient, wherein the control algorithm receives the signal from the second sensor, processes the signal, and regulates the distribution of medical treatment from the second medical device to the patient.

32.   (Withdrawn) The medical treatment administration system of claim 31, wherein the control algorithm for the first medical device is distinct from the control algorithm for the second medical device.

33.   (Withdrawn) A medical treatment administration system for delivering a medical treatment to a patient, comprising:

a medical device that delivers a medical treatment to a patient;

an electronic processor coupled to the medical device; and,

a sensor coupled to the processor, the sensor receiving a signal from the patient's environment, the sensor further transmitting the signal to the processor, wherein the processor regulates the distribution of medical treatment from the medical device to the patient over a period of time based on a calculation of the signal.

34.   (Withdrawn) A medical apparatus, comprising:

a programmable medical device for administering a medical treatment to a patient, wherein the programmable medical device has a means for administering the medical treatment to the patient, wherein the programmable medical device has a first input device for entering control commands for the programmable medical device, and wherein the programmable medical device is disposed at a first location;

a controller having a control algorithm coupled to the programmable medical device, the controller having an input device for entering control commands for the controller, the controller receiving a signal relating to the physiological condition of the patient, the controller further controlling the medical device in response to a physiological change in the condition of the patient.

35.   (Withdrawn) The medical apparatus of claim 34, wherein the input device for the controller is disposed at a second location.

36.   (Withdrawn) The medical apparatus of claim 34, wherein the input device for controller and the programmable medical device is the same device.

37.   (Withdrawn) The medical apparatus of claim 34, further comprising a second programmable medical device for administering a second medical treatment to a patient, wherein the controller controls both the first and second programmable medical devices.

38.   (Withdrawn) The medical apparatus of claim 34, further comprising a second programmable medical device for administering a second medical treatment to a patient, and a second controller for controlling the second programmable medical device, wherein the second controller receives a signal relating to the physiological condition of the patient.

39.   (Withdrawn) The medical apparatus of claim 34, further comprising a second programmable medical device for administering a second medical treatment to a patient, the second programmable medical device being manipulated based on a signal received relating to the patient's environment.

40.   (Original) A method to provide medical treatment for a patient where the delivery of the medical treatment is triggered by one or more physiological conditions of the patient, comprising the steps of:

      providing a medication treatment device;

      providing a control algorithm;

      providing a sensor; and,

      utilizing the sensor to measure a physiological condition of the patient, transferring the measured condition to the control algorithm and entering the measured condition in the control algorithm, developing a result, developing feedback control based on the result from the control algorithm, and manipulating the medication treatment device based on the feedback control to deliver treatment to the patient.

41.   (Original) The method of providing medical treatment to a patient of claim 40, further comprising:

      providing an input device for the control algorithm, and manipulating the input device to modify the control algorithm.

42.   (Withdrawn) The method of providing medical treatment to a patient of claim 40, wherein the medication treatment device is an infusion pump.

43.   (Withdrawn) A method to provide medical treatment for a patient where the delivery of the medical treatment is triggered by one or more environmental conditions, comprising the steps of:

      providing a medication treatment device;

      providing a control algorithm;

      providing a sensor; and,

      utilizing the sensor to measure an environmental condition of the environment of the patient, transferring the measured condition to the control algorithm and entering the measured condition in the control algorithm, developing a result, developing feedback control based on the result from

the control algorithm, and manipulating the medication treatment device based on the feedback control to deliver treatment to the patient.

44.	(Withdrawn) The method of providing medical treatment to a patient of claim 43, further comprising:

providing a remote input device for the control algorithm, and manipulating the input device to modify the control algorithm.